

C4 standard integrals snap cards / flash cards

see <http://flashcards.educationlabs.com/Default.aspx#/Play/?deckid=3339>

$$\int x^n dx$$

$$\frac{x^{n+1}}{n+1} + C$$

$$\int e^x dx$$

$$e^x + C$$

$$\int \frac{1}{x} dx$$

$$\ln|x| + C$$

$$\int \cos x dx$$

$$\sin x + C$$

$$\int \sin x \, dx$$

$$-\cos x + C$$

$$\int \sec^2 x \, dx$$

$$\tan x + C$$

$$\int \operatorname{cosec} x \cot x \, dx$$

$$-\operatorname{cosec} x + C$$

$$\int \operatorname{cosec}^2 x \, dx$$

$$-\cot x + C$$

$\int \sec x \tan x \, dx$	$\sec x + C$
$\int f'(ax + b) \, dx$	$\frac{1}{a}f(ax + b) + C$
$\int (ax + b)^n \, dx$	$\frac{1}{a} \frac{(ax + b)^{n+1}}{n + 1} + C$
$\int e^{(ax+b)} \, dx$	$\frac{1}{a}e^{(ax+b)} + C$

$$\int \frac{1}{ax + b} dx$$

$$\frac{1}{a} \ln|ax + b| + C$$

$$\int \cos(ax + b) dx$$

$$\frac{1}{a} \sin(ax + b) + C$$

$$\int \sin(ax + b) dx$$

$$-\frac{1}{a} \cos(ax + b) + C$$

$$\int \sec^2(ax + b) dx$$

$$\frac{1}{a} \tan(ax + b) + C$$

$\int \operatorname{cosec}(ax + b)\cot(ax + b) \, dx$	$-\frac{1}{a}\operatorname{cosec}(ax + b) + C$
$\int \operatorname{cosec}^2(ax + b) \, dx$	$-\frac{1}{a}\cot(ax + b) + C$
$\int \sec(ax + b)\tan(ax + b) \, dx$	$\frac{1}{a}\sec(ax + b) + C$

$\int \tan(x) \, dx$	$\ln \sec(x) + C$
$\int \sec(x) \, dx$	$\ln \sec(x) + \tan(x) + C$
$\int \cot(x) \, dx$	$\ln \sin(x) + C$
$\int \operatorname{cosec}(x) \, dx$	$-\ln \operatorname{cosec}(x) + \tan(x) + C$

